

5. (Amended) The preparation of claim 1, wherein the polypeptide has anticoagulant or antithrombotic activity.

6. (Amended) The preparation of claim 1, wherein the derivative is dissolved in the storage solution.

7. (Amended) A method for making a preparation for perfusion of an organ prior to transplantation or storage of the organ comprising a soluble derivative of a soluble polypeptide, said derivative comprising two or more heterologous membrane binding elements with low membrane affinity covalently associated with the polypeptide, which elements are capable of interacting, independently and with thermodynamic additivity, with components of membranes of the organ exposed to extracellular perfusion fluids; and a physiologically acceptable flush storage solution comprising: expressing DNA encoding the polypeptide portion of the derivative in a recombinant host cell;

post-translationally modifying the polypeptide to chemically introduce the membrane binding elements to form the derivative;

recovering the derivative; and

mixing the derivative with the flush storage solution.

8. (Amended) The method of claim 7 further comprising: preparing a replicable expression vector capable, in the recombinant host cell, of expressing the DNA encoding the polypeptide; transforming the recombinant host cell with the vector; and culturing the transformed host cell under conditions permitting expression of the DNA polymer to produce the polypeptide.

9. (Amended) A method for preparing an organ prior to transplantation or storage of the organ comprising:

making a preparation for perfusion of an organ prior to transplantation or storage of the organ, said preparation comprising, a soluble derivative of a soluble polypeptide, said derivative comprising two or more heterologous membrane binding elements with low membrane affinity covalently associated with the polypeptide, which elements are capable of interacting, independently and with thermodynamic additivity, with components of membranes of the organ exposed to extracellular perfusion fluids; and a physiologically acceptable flush storage solution; and

perfusing the organ with the preparation.

10. (Amended) A method of prevention, treatment or amelioration of a disease or disorder associated with inflammation, inappropriate complement activation, or inappropriate activation of coagulant or thrombotic processes of an organ prior to, during or after transplantation or storage of the organ comprising:

making a preparation for perfusion of an organ prior to transplantation or storage of the organ, said preparation comprising, a soluble derivative of a soluble polypeptide, said derivative comprising two or more heterologous membrane binding elements with low membrane affinity covalently associated with the polypeptide, which elements are capable of interacting, independently and with thermodynamic additivity, with components of membranes of the organ exposed to extracellular perfusion fluids; and a physiologically acceptable flush storage solution; and

perfusing the organ with the preparation.